

to watch the combs and brood as the bees are developing them, where such is the case, there should be a colony or more as required set apart for this purpose, so that the others will not be promiscuously overhauled and disturbed when not necessary and to their hurt, especially during this month and the fore part of May.

Black Brood

The New York
Disease by Dr.
Howard.

Dr. Howard of Fort Worth, Texas Bacteriologist of the division of Entomology, Washington, D. C., issued his report on the above disease in a recent number of *Gleanings in Bee Culture* from which we take the following.

In my investigations of this disease I have carefully examined each specimen separately, and noted the details in my laboratory note-book, from which extracts have been made. I have received specimens from Messrs. Geo. W. York, editor of *American Bee Journal*, Chicago, Ill.; E. R. Root, editor of *Gleanings in Bee Culture*, Medina, Ohio; N. D. West, New York State Bee Inspector, Middleburgh, N. Y.; and P. H. Elwood, Starkville, N. Y. All these men have furnished, not only material, but have been active in getting data for the investigation. Mr. N. D. West has kindly written up the history of the disease as it appears in the apiaries he has visited. Mr. P. H. Elwood has contributed his experience, as well as answered questions relative to certain points of interest. In making a report of the work and of the character of the disease, I have

endeavored to write a complete history of its nature so far as is known, so that those who have not seen it may appreciate the work, and be able, possibly, to recognize it. I have drawn largely upon what these gentlemen have furnished, as well as from notes taken from my experience with the disease transferred by infected food to healthy bees in my own laboratory.

I have made more than one thousand and microscopical examinations, and have given the results of those of the most practical importance, followed by a general summing-up of the facts, and the conclusions based upon them.

A different diagnosis has been made between this disease and those of foul brood and pickled brood, considering most of the diagnostic points worthy of interest.

On account of the character of the dead brood; its beginning with a dark spot on the larva, which increases in size, becomes darker, and finally black, for convenience and brevity the name black brood has been suggested, and this name is used in the text.

In conclusion are given a few remarks upon the recurrence and treatment of this disease from a practical standpoint. * * * * *

Conclusions — My investigations have been carefully conducted; although under disadvantages as to season, etc., they have in a great measure been satisfactory. Many points of vital interest have been made clear, while others of equal importance are necessarily obscure. It is clearly not foul brood. It is clearly not pickled brood. It is clearly something new. It is apparently a disease of the pupa stage. The infection is clearly not in the pollen—not due to a fungus but due to bacteria.

All diseases, in animal and vegetable